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AUTHOR Small, Jo Ann
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ABSTRACT

Many studies have demonstrated that psychological needs and occupational values differ for males and females. An investigation of the interaction effects between occupation and gender compared the scores of men and women in the same occupations on scales measuring psychological needs, occupational values, and concerns about worker traits and job characteristics. Males (N=148) and females (N=245), employed in social work, radiological technology, and secondary social studies teaching, completed the Hall Occupational Orientation Inventory. A multiple-factor analysis of variance performed on each variable tested for significant interactions and significant differences between occupation, gender, and race. Results indicated that concerns about adequate physical capacity for the job were significantly greater for women. Women demonstrated less needs for risk-taking and greater needs for security, and were less people-oriented than men. Significant interactions between occupation and gender occurred on five personality need construct scales (Creativity-Independence, Esteem, Personal Satisfaction, Routine-Dependence, and People Orientation), while no significant interactions occurred on the situational variables scales. Results imply that separate theoretical formulations about vocational choice of men and women may be necessary to the extent that the theories are based on these five personality constructs. (Author/NRB)

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**Sex Differences in Personality Characteristics
of Workers in Selected Occupations**

**A Paper Presented to
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by

**Jo Ann Small, Ed.D.
University of Houston Downtown College**

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Introduction

Most vocational theorists, in attempting to account for occupational choice, suggest some sort of congruence between the psycho-social characteristics of the individual on one hand and the requirements, rewards, and activities involved in the occupational role on the other. Drives, needs, traits, aptitudes, modal personal orientations, self-concepts have all been examined for their significance (Forer, 1953; Bordin, Nachmann, & Segal, 1963; Roe, 1964; Williamson, 1965; Holland, 1966; Hoppock, 1967; Osipow, 1968). Roe (1956), for example, early postulated that occupations are chosen to meet personality needs and that individuals become oriented toward those occupations that they believe will best satisfy the needs most important to them. Initially this was a frequent clinical impression (Jones, 1923; Zilboorg, 1934; Stekel, 1939; Symonds, 1946; Drasgow, 1957). However, the postulate has since acquired extensive empirical validation (Small, 1953; Weinstein, 1953; Sternberg, 1955; Nachmann, 1960; Siegelman & Peck, 1960; Gonyea, 1961; Segal, 1961; Galinsky, 1962; Korn, 1962; Miller, 1962; Beall & Bordin, 1964; Thumin, 1965; Elton & Rose, 1967; Holland, 1968; Medvene, 1969; Smith, 1969; Hall, 1969; Hall, Tarrier, & Shappell, 1971; Peck, 1971; Rose & Elton, 1971).

Almquist and Angrist (1970) observed, however, that extraneous circumstances interfere in the lives of most women, such that these theoretical principles based on personality constructs never have the opportunity to become operative. Daly (1971) concluded that

research findings seem to point to what could be called a "situational view of women's choices."

The decisions women make about career patterns and specific occupations are made in the light of their own individual priorities, at a particular point in time, in relation to their perception of the meaning of a number of variables impinging upon and within them.

Zytowski (1960) also theorized that external, environmental, situational factors, as opposed to personality variables, carried greater weight in women's occupational choices than in men's choices. This is a logical generalization in light of the historical role of women in our society and their tendency to choose those occupations stereotyped as feminine. Masih (1967) and Greenhaus (1971) both found that men are more career salient than women. Dole and Passons (1972) found more sex differences than racial differences in both occupational values and occupational interests. Ace, Graen, and Dawis (1972) found sex to be the most influential variable affecting work attitudes. Rose and Elton (1971), using Holland's Omnibus Personality Inventory, found both occupational differences and sex differences, with an interaction of those differences, indicating that the differences were not the same for both sexes. Centers and Bugenthal (1966), studying sex differences in intrinsic versus extrinsic job motivations, found only two: women placed a higher value on interpersonal relationships (good co-workers) than did men; men placed greater importance on self-expression. Barnett (1975) found that males learn to prefer prestigious occupations while females learn to avoid them. In

similar fashion, Kipnis (1976) suggested that the nature of an occupation does not determine the sex of the individual attracted to it, but rather it is the status of the occupation which differentially influences male and female entrance into it.

Rosenberg (1977) studied the effects of economic outlook information on the career decision making of college students and found that the reality of the market place had a greater effect on women than on men.

One study (Sampson, Stripling, & Loesch, 1977) of college students found that the most preferred work-related values for males were job security and opportunity for advancement, while the most preferred work-related values for females were the opportunity to help people and the freedom to use one's own ideas and methods. Singer (1974) also found strong male preferences for salary and security—understandable in today's job market—and female preferences for opportunities for advancement and recognition for the work they do—both needs which have been generally frustrated in the past, but he found no evidence of the sex-work-role stereotypes frequently posited. Shinar (1975) established sextypes for a sample of 129 jobs by having students rate each job in terms of masculinity-femininity. Her findings indicate that male and female subjects judged sex appropriateness very similarly. Schrank and Riley (1976) pointed out that such perceptions of sex appropriateness of the work situation on the part of those responsible for hiring decisions may account for the sex-linked nature of the demand for certain

types of employees. Moreover, such views may also account for the sex-linked nature of the supply of job applicants. Duncan, Schuman, and Duncan (1973) found that jobs most often cited by both males and females as inappropriate for women were factory and craft jobs, which require extensive interactions with things. Relatively few people cited professional jobs which require interactions with data or people as inappropriate for women. Similarly, Schlossberg and Goodman (1972) reported that elementary school children are more likely to say that women cannot do jobs oriented toward things (e.g., mechanic) than to say they cannot do jobs oriented toward people and data (e.g., doctor). Krefting and Berger (1979) examined the sex appropriateness of job tasks, or requirements, as defined by the Dictionary of Occupational Titles, as opposed to jobs themselves. Their results indicated that interacting with things is perceived as masculine, interacting with people is perceived as feminine, and interacting with data is perceived as falling between the other two.

The developmental pattern of female career commitment includes an earlier career saliency and tentative choice than for males (Davis, Hagen, and Strouf, 1962; Smith, 1972; Stafford, 1967; Astin, 1968). This difference in development is already present by the age of twelve. However, a study of college women (Harmon, 1971) indicated that they do not express as many or as varied preferences as when they were preadolescents. Their later preferences are more restricted to traditionally female fields.

Achievement motivation differences between the sexes appear to be highly relevant for occupational choice. The developmental pattern of achievement behavior for women is different: Girls achieve well in the early school years, but demonstrate lowered achievement-striving in adolescence. The usual interpretation of this is that the girl perceives achievement as a threat to her femininity and consequently reduces her achievement efforts in order not to jeopardize her social success (Oliver, 1975). A number of studies document a perceived incompatibility or conflict between achievement and affiliation or femininity (Kagan & Moss, 1962; Baruch, 1966; Tomlinson-Keasey, 1974; Horner, 1969).

A review of child development literature (Hoffman, 1972), particularly the research on independence and autonomy training of young children, early mother-infant interaction, and sex differences in achievement motivation provide support for this theory of female underachievement: Female children are not given enough parental encouragement in early strivings for independence. Consequently, female children do not develop the confidence and sense of independence needed to cope with their environments; they continue to be dependent upon others; their achievement behaviors are motivated by a desire to please. Moreover, the females' high need for affiliation often blocks their achievement motives, and their performance is either sacrificed or achieved at the cost of high levels of anxiety.

Even at very early ages interests in occupations appear to be conditioned by adherence to the traditional definitions of sex-role

patterns. Siegel's study (1973), for example, found that by the second grade children have absorbed the societal expectations of "sex-appropriate" work, are aware of their own sexual identity at some level, and have selected the traditional cultural stereotype.

In summary, many studies demonstrate that psychological needs and occupational values differ with sex. Hall, Tarrier, & Shappell (1971), for example, found that these scales discriminated between males and females: Creativity—Independence, Risk, Information—Knowledge, Belongingness, Security, Aspiration, Esteem, Self-Actualization, Personal Satisfaction, Data Orientation, Things Orientation, People Orientation, Location Concern, Aptitude Concern, Monetary Concern, Qualifications Concern, Time Concern, Defensive-ness. Further, the literature (e.g., Rose & Elton, 1971; Hall, Tarrier, & Shappell, 1971) validates the tenet that numerous personality constructs and situational variables differentiate occupations.

A Summary of the Study

The purpose of this study was to compare men and women within the same occupations with respect to their scores on scales measuring psychological needs, occupational values, and concerns about worker traits and job characteristics. The primary question to be answered was: Are there significant interaction effects between occupation and sex? The presence of a significant interaction effect in the psychological need variables would demonstrate that not only are the personality patterns of men and women different

but they are differentially different between occupations. Such a finding would support the need for separate vocational theories for men and women, at least for those theories which are based on personality constructs. The presence of a significant interaction effect in the concerns about worker traits and job characteristics would support the contention that not only are the situational variables sex differentiating, but they are differentially different between occupations, and that any theory of vocational choice for women should take this differential effect into account.

Because educational and vocational values have been found to vary with race, and because race is not controlled in the samples in this study, it was included in the study as an independent variable.

Male and female subjects, both white and non-white, representing the three occupations of social work, radiological technology, and secondary social studies teaching, were given the Hall Occupational Orientation Inventory. The subjects were 55 male and 110 female ACSW certified social workers employed in Houston, Texas; 26 male and 66 female registered radiological technologists employed in Houston; 67 male and 69 female high school social studies teachers employed in the Houston Independent School District. These three occupational groups were chosen because they are not strongly dominated by either sex, and therefore entrance into them is not biased by traditional sex stereotypes.

The theoretical foundations of the Hall Occupational Orientation Inventory are (1) the personality-need theory postulated by

Abraham Maslow adapted to a theory of occupational choice by Anne Roe; (2) worker traits, as identified and researched by the United States Department of Labor; and (3) job-content characteristics, also identified and researched by the United States Department of Labor (Hall, Tarrier, and Shappell, 1971).

A multiple-factor analysis of variance was performed on each variable of the Hall Occupational Orientation Inventory to test for significant interaction and significant difference between the independent variables of occupation, sex, and race.

Findings

Table 1 is the summary table of the multivariate analysis of variance. Table 2 summarizes significant differences and interactions between the means.

A significant interaction between occupation, sex, and race obtained on People Orientation, a personality construct.

Creativity-Independence, Belongingness, Personal Satisfaction, and Routine-Dependence—personality variables, and Monetary Concern—an extrinsic or situational variable—yielded significant interactions between sex and race.

The scales of Belongingness, Esteem, Self-Actualization, Personal Satisfaction, Routine-Dependence, and People Orientation—all personality needs and values—yielded significant interactions between occupation and race.

A significant interaction between occupation and sex occurred on these scales: Creativity-Independence, Esteem, Personal Satisfaction,

Sex Differences in Occupations

Table 1
Summary of the Multivariate Analysis of Variance

Variable	Source	F-Ratio
Creativity, Independence	O	5.39 **
	S	2.75
	R	3.39
	OxS	5.45 **
	OxR	1.26
	SxR	6.90 **
	OxSxR	1.12
Risk	O	5.99 **
	S	5.99 *
	R	.20
	OxS	2.05
	OxR	1.23
	SxR	2.19
	OxSxR	.68

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Information, Knowledge	O	1.58
	S	.03
	R	.54
	OxS	1.67
	OxR	2.43
	SxR	.02
	OxSxR	2.17
Belongingness	O	1.80
	S	1.50
	R	1.50
	OxS	2.40
	OxR	7.73 **
	SxR	4.99 *
	OxSxR	.91

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Security	O	2.19
	S	5.08 *
	R	.34
	OxS	.70
	OxR	1.73
	SxR	.05
	OxSxR	.14
Aspiration	O	.28
	S	.12
	R	.82
	OxS	1.89
	OxR	1.44
	SxR	.58
	OxSxR	.56

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Esteem	O	1.66
	S	.45
	R	1.52
	OxS	4.45 *
	OxR	4.48 *
	SxR	.10
	OxSxR	1.33
Self-Actualization	O	3.25 *
	S	1.28
	R	1.39
	OxS	2.88
	OxR	4.01 *
	SxR	.00
	OxSxR	1.28

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Personal Satisfaction	O	.41
	S	.66
	R	.05
	OxS	5.82 **
	OxR	4.37 *
	SxR	5.90 **
	OxSxR	1.12
Routine-Dependence	O	21.65 **
	S	.35
	R	14.46 **
	OxS	3.43 *
	OxR	3.56 *
	SxR	4.54 *
	OxSxR	.19

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Data Orientation	O	.19
	S	2.99
	R	5.06 *
	OxS	.95
	OxR	.24
	SxR	.33
	OxSxR	2.26
Things Orientation	O	47.44 **
	S	.43
	R	2.94
	OxS	1.69
	OxR	1.47
	SxR	1.05
	OxSxR	2.27

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
People Orientation	O	5.11 *
	S	10.86 **
	R	.05
	OxS	4.31 *
	OxR	4.99 **
	SxR	.33
	OxSxR	5.81 *
Location Concern	O	3.92 *
	S	1.20
	R	3.60
	OxS	.53
	OxR	.00
	SxR	1.08
	OxSxR	1.46

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Aptitude Concern	O	.10
	S	.22
	R	8.04 **
	OxS	2.95
	OxR	.69
	SxR	.07
	OxSxR	2.18
Monetary Concern	O	6.26 **
	S	2.26
	R	6.33
	OxS	.98
	OxR	.60
	SxR	4.62 *
	OxSxR	2.21

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Physical Abilities Concern	O	2.39
	S	5.61 *
	R	16.63 **
	OxS	.15
	OxR	1.83
	SxR	.65
	OxSxR	1.39
Environment Concern	O	2.12
	S	2.69
	R	1.47
	OxS	.16
	OxR	.66
	SxR	1.71
	OxSxR	.70

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Co-Worker Concern	O	.49
	S	1.43
	R	4.75 *
	OxS	2.74
	OxR	.78
	SxR	.14
	OxSxR	1.82
Qualifications Concern	O	6.88 **
	S	.78
	R	4.11 *
	OxS	.51
	OxR	1.99
	SxR	1.45
	OxSxR	.76

* significant at .05 level of confidence

** significant at .01 level of confidence

Sex Differences in Occupations

Variable	Source	F-Ratio
Time Concern	O	1.90
	S	3.56
	R	7.91 **
	OxS	1.75
	OxR	.05
	SxR	2.02
	OxSxR	.38

* significant at .05 level of confidence

** significant at .01 level of confidence

Table 2

Significant Differences and Significant Interactions Between the Means on the
Hall Occupational Orientation Inventory Scales

Scales	Occupation	Sex	Race	Occupation x Sex	Occupation x Race	Sex x Race	Occupation x Sex x Race
Creativity, Independence	**			**		**	
Risk	**	*					
Information, Knowledge							
Belongingness					**	*	
Security		*					
Aspiration							
Esteem				*	*		
Self-Actualization	*				*		
Personal Satisfaction				**	*	**	
Routine-Dependence	**		**	*	*	*	
Data Orientation			*				
Things Orientation	**						
People Orientation	*	**		*	**		*
Location Concern	*						
Aptitude Concern			**				
Monetary Concern	**		*			*	
Physical Abilities Concern		*	**				
Environment Concern							
Co-Worker Concern			*				
Qualifications Concern	**		*				
Time Concern			**				

* significant at .05 level of confidence

** significant at .01 level of confidence

Routine-Dependence, and People Orientation—all personality needs and values.

There were significant differences between the races on Routine-Dependence and Data Orientation—intrinsic personality constructs—and Aptitude Concern, Monetary Concern, Physical Abilities Concern, Co-Worker Concern, Qualifications Concern, and Time Concern—extrinsic or situational variables.

Sex was significantly differentiated by Risk, Security, People Orientation—personality constructs—and Physical Abilities Concern—an extrinsic or situational variable.

Significant differences between occupations were obtained on these scales: Creativity-Independence, Risk, Self-Actualization, Routine-Dependence, Things Orientation, and People Orientation—personality constructs—and Location Concern, Monetary Concern, and Qualifications Concern—extrinsic or situational variables.

Conclusions

Nine of the 21 HOOI scales differentiated between occupations; six of these nine scales were basic motivational needs, a finding consistent with the frequently obtained difference between occupations with respect to personality constructs. This finding further validates the basic tenet that occupations are chosen to meet personality needs and that individuals become oriented toward those occupations that they believe will best satisfy the needs most important to them. It specifically validates Roe's adaptation (1956) of Maslow's personality-need theory to occupational choice,

which is one of the theoretical bases of the HOOI.

Occupational differences with respect to the need for creativity and independence are in the expected direction of strength of need, i.e., social workers have the strongest need, teachers a lesser need, and technologists the weakest need. This is probably an accurate reflection of the three occupational contexts in terms of the worker's freedom to use his imagination, creativity, and ideas. The need for risk was greatest for technologists, less for social workers, and least for teachers. Technologists would logically have the strongest orientation toward work activity that involves pressure, decision-making, and even emergencies. Social workers demonstrated the strongest need for self-actualization, while teachers and technologists were close together with a distinctly lesser need. Social work would logically afford the worker the greatest opportunity to develop his own personality, use a variety of talents, and to be self-directed.

The need for routine-dependence (an orientation toward work activity where there is a set routine, explicit instructions, and dependable supervision) was logically found to be greatest for technologists, less for teachers, and least for social workers. A things-orientation was strongest for technologists, less for teachers, and least for social workers—the expected direction. The reverse and logical order was obtained on the People Orientation scale—the need was strongest for social workers, less for teachers, and weakest for technologists. There is no obvious explanation for

the obtained differences on the Location Concern scale: Social workers expressed the least concern, teachers more, and technologists the most. Monetary Concern reflected the greatest concern among technologists, less for teachers, and least for social workers. This is consistent with the remuneration involved—technologists earn the least, teachers more, and social workers the most. The greatest discrepancy on the Qualifications Concern scale was in the considerably greater concern of the technologists compared to the social workers and teachers, who were quite close together. A possible explanation for this greater concern lies in the quite varied training of radiological technologists, ranging from a six-months vocational training program to a four-year professional degree program.

Only the need constructs of Risk, Security, and People Orientation significantly discriminated the sexes, compared to the earlier findings of Hall, Tarrier, and Shappell (1971), wherein 12 of the 13 scales discriminated the sexes. Because the items and scales of the HOOI are rationally constructed, this finding suggests a trend toward the conscious recognition and pursuit of the basic needs via vocation by women as well as men. Women demonstrated less need for risk-taking, a greater need for security, and less of a people-orientation than men. The weaker people-orientation of women finding contradicts the popular notion that women-in-general are more "people-oriented" than men. Concern about adequate physical capacity for the job (Physical Abilities) was significantly greater in women. This difference was greatest among radiological

technologists. The technologists must, in some instances, move, lift, and manipulate patients—a probable explanation for this greater concern.

Significant differences between the races on six of the situational variables as opposed to significant differences on only two need construct scales—Routine-Dependence and Data Orientation—suggest the continued concern of minority groups about the social factors involved in vocational activity, inasmuch as it was almost always the non-white groups demonstrating the greater concern. It appears, then, that the races are further apart motivationally than are the sexes.

The significant interaction between occupation, sex, and race obtained on People Orientation indicates that not only are men and women as well as white and non-white different with respect to one another, but they are also differentially different with respect to occupation in terms of the need to work with people.

The significant interactions between sex and race on Creativity-Independence, Belongingness, Personal Satisfaction, Routine-Dependence, and Monetary Concern imply that, with respect to these variables, the needs of men and women are differentially different with respect to race.

Significant interactions between occupation and sex occurred on five need construct scales—Creativity-Independence, Esteem, Personal Satisfaction, Routine-Dependence, and People Orientation—while no significant interactions occurred on the situational

variable scales.

The absence of significant interaction between occupation and sex on the situational variables refutes the hypotheses of Stefflre (1966) and Daly (1971) that the crucial variables in vocational development are more apt to be accidental and economic—or situational—for women than men. Apparently the more equal occupational entry opportunity, more equal pay, more adequate transportation, better working conditions, more adequate child care resources, and easier housekeeping have reduced the motivational force of the situational variables. Greater participation of the male in the care of the home and children probably also diminishes the importance of the situational variables in the vocational decisions of the female.

The significant interaction between occupation and sex on five of the personality need scales (Creativity-Independence, Esteem, Personal Satisfaction, Routine-Dependence, and People Orientation) is consistent with the findings in the Rose and Elton study (1971), in which they obtained a significant interaction effect between occupation and sex when they compared Omnibus Personality Inventory scores of males and females graduating in majors classified into five Holland occupational categories. These five significant interactions suggest that separate theoretical formulations about vocational choice may be necessary for men and women to the extent that the theories are based on these five personality constructs.

Specific patterns of occupation-sex interaction were as follows: The need for creativity and independence was greater for male social workers and technologists and less for male teachers, as opposed to their female counterparts. Male social workers demonstrated a greater need for esteem than female social workers, male teachers slightly more, and male technologists less than female technologists. Male social workers expressed a greater need for personal satisfaction from their work, while male teachers and male technologists needed less personal satisfaction than females. Male social workers and male technologists evidence less need for routine and dependence on supervision than did the females, while male teachers had a stronger need for routine and dependence than did female teachers. Male social workers had a far stronger people orientation than female social workers; teachers were virtually the same; while male technologists exceeded females in this need. There are no obvious specific reasons for these patterns of interactions.

A probably general explanation for the obtained occupation and sex interactions lies in the influence of sex-role stereotypes on occupational choice. This influence was an uncontrolled variable in this study, while the literature suggests that it is still strongly linked to occupational decision-making. Osipow (1973), much like Roe (1964), has further suggested that women functioning at very high professional levels and women at the unskilled level may resemble their male counterparts more than do women in middle

level careers. If this hypothesis is true, then it would be applicable to this study, for the three occupations represented can be considered middle and/or upper-middle level occupations.

In the past the three occupations represented in this study were dominated by women, although they are not now strongly female stereotyped or dominated. It is possible that sex-appropriateness accounted for the choice of many of the female subjects, particularly the older ones. A number of the older respondents did, in fact, comment on the restricted opportunities available to them following school. One typical statement obtained in the biographical data was, "Teaching was one of the very few occupations available to women at the time I finished college." Thus, sex-restriction may well have kept the principle of occupational choice representing basic need fulfillment from operating in those subjects. If the factor of age had been controlled and samples restricted to younger workers, the interaction effect between occupation and sex would possibly have not occurred. However, "equal opportunity" is such a recent change in the occupational choice context, that it may not yet be reflected in workers already educated and in the field.

With respect to the main effects of sex and occupation and the interaction effects between sex and occupation, it should be noted that while a number of statistically significant ratios were obtained, few were of the magnitude to be practically significant in terms of conclusive theoretical development. The occupational differences on the Routine-Dependence and Things Orientation

scales were of this magnitude. These variables apparently have more specific vocational relevance than do the more basic kinds of human needs such as belongingness and esteem. Only the sex difference on the People-Oriented scale had strong practical significance, in that it contradicted the traditional belief that women are more people-oriented than men. None of the occupation-sex interactions were profound.

The significant interaction between occupation and race on the scales measuring the needs for Belongingness, Esteem, Self-Actualization, Personal Satisfaction, Routine-Dependence, and People Orientation indicates that these needs operate differently between the races in different occupations. In the past, race has restricted occupational entry opportunity in much the same way as sex. Thus, race-appropriateness may have kept need fulfillment from operating in the choice process of minority subjects in the same way that sex-appropriateness operated in female subjects.

Recommendations

Because race varied even more than sex in this study, particularly on situational variables, further study in this area is certainly indicated. The findings suggest that cultural differences may have far greater implications for occupational choice than do sex differences.

Further studies examining the sex-differentiating influence of personality constructs on occupational choice should control the variable of age. As young women become more aware of the rapidly expanding occupational opportunities available to them,

and as the tie between sex-role and occupational-role weakens, the occupational choices of these young women will probably more accurately reflect the satisfaction of basic personality needs. Thus, a replication study utilizing only young subjects should yield fewer, if any, significant interactions between occupation and sex.

This apparent weakening of the sex-role influence on the occupational choice of women could be investigated directly by comparing young female workers with older female workers in these same occupations on the five personality construct scales which yielded significant interactions between occupation and sex: Creativity-Independence, Esteem, Personal Satisfaction, Routine-Dependence, and People-Orientedness.

It is recommended that counselors make an effort to become aware of their own sex-role biases. Studies (Pietrofesa & Schlossberg, 1969; Broverman, et al, 1970; Friedersdorf, 1970; Thomas & Stewart, 1971) have shown that counselors, both male and female, are more accepting of traditional female occupational goals for girls than of non-conforming goals. Consciousness-raising exercises would be helpful in this regard. Counselors can certainly help young women in this period of social change by presenting non-sex-biased vocational alternatives appropriate for the personality needs, aptitudes, interests, and the choice of total life style of the individual client.

It is recommended that counselors emphasize the theoretical approach of vocational development in its broadest sense of total

life planning, as opposed to the restricting concept of occupational choice. This developmental emphasis in the counseling of girls and young women will help destroy the artificial and unnecessary dichotomous choice—marriage or a career—that has so profoundly pervaded the thinking of young women. Only this emphasis will enable the young woman to realize that in the total life span, education, career, marriage, children, avocation—one or all of these options—are possible for her.

This emphasis will lift aspirations above the old and persistent assumptions about "women's roles" and "women's interests" and result in decisions and choices that fulfill the authentic woman.

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